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## WAYS AND WATERS IN MASSACHUSETTS

WHEN ways are laid out, relocated, or repaired, problems frequently arise with respect to waters. The surface water which collects on the way must be taken care of. It may be necessary to cross a stream. A stream may rise even within the limits of the way. Surface water may flow on to the way from adjoining estates. The physical problems with respect to these waters are for the engineer. But they raise legal problems as to the relative rights of the public and of abutters. The purpose of this article is to consider the rules of law which govern their solution.

Ways are of different sorts, such as highways, town ways, and private ways. But for the purposes of this article the distinction between these kinds of ways need not be considered. In this article the highway will be treated as the typical way unless something different is expressly stated. The problem, then, is as to the legal rules which govern the relation between highways and waters.

In Massachusetts the fee of the highway is generally in the abutter.<sup>1</sup> But the fee is subject to the easement of passage incident to the highway. Moreover, the highway easement is of far-reaching character. It is not confined to a simple right on the part of the public to pass and repass on foot or in vehicles. The public as an incident of the easement may place structures in the way. Thus, poles,<sup>2</sup> pipes,<sup>3</sup> and wires<sup>2</sup> impose no additional servitude. Sewers may be built beneath the highway without "taking" any additional property.<sup>4</sup> Even a subway gives the owner of the fee no right to complain.<sup>5</sup> Horse<sup>6</sup> and trolley<sup>7</sup> roads are likewise

<sup>1</sup> *Boston v. Richardson*, 13 Allen 146 (1866).

<sup>2</sup> *Pierce v. Drew*, 136 Mass. 75 (1883); *Cheney v. Barker*, 198 Mass. 356, 84 N. E. 492 (1908).

<sup>3</sup> *Bishop v. North Adams Fire District*, 167 Mass. 364, 45 N. E. 925 (1897).

<sup>4</sup> *Lincoln v. Commonwealth*, 164 Mass. 1, 41 N. E. 112 (1895); *Lawrence v. Nahant*, 136 Mass. 477 (1884).

<sup>5</sup> *Sears v. Crocker*, 184 Mass. 586, 69 N. E. 327 (1904).

<sup>6</sup> *Attorney-General v. Metropolitan R. R. Co.*, 125 Mass. 515 (1878); *White v. Blanchard Bros. Granite Co.*, 178 Mass. 363, 59 N. E. 1025 (1901).

<sup>7</sup> *Howe v. West End Street Ry. Co.*, 167 Mass. 46, 44 N. E. 386 (1896); *Eustis v. Milton Street Ry. Co.*, 183 Mass. 586, 67 N. E. 663 (1903).

within the easement. But the right to maintain these incidentals of the highway easement continues only so long as the highway itself exists, and ceases if it be discontinued.<sup>8</sup> The constant unfolding of the highway easement so as to permit new uses by the public has left little save a name to the ownership of the fee by the abutter. So long as the highway exists as such the public has a power to act, which is substantially equal to the right of the public in those communities which own the fee of their streets.<sup>9</sup>

The right of the public is confined to the limits of the highway location. Thus where the city, in bringing a street to the established grade, caused the embankment which supported the street to encroach upon the plaintiff's land, the plaintiff may maintain an action of tort therefor and is not liable in tort for digging away the embankment up to his line.<sup>10</sup> Again, an abutter may destroy a gutter which has been built upon his land, even though the water flowing therein is turned back and injures the highway.<sup>11</sup> In neither case was the plaintiff's land "taken" for this purpose. Consequently the act of the public authorities was an unwarrantable encroachment upon land beyond the limits of the highway.

Changes in the highway surface made under public authority within the limits of the highway stand upon a different footing. At common law such changes gave no right of action, if they were made with reasonable care. Thus tort will not lie for damage to an abutter, caused by repairs made in a proper manner in the highway.<sup>12</sup> Indeed the public authorities may change the grade of the highway without incurring common-law liability to abutters, provided the change is made in a reasonable manner.<sup>13</sup> On the other hand, if the work be done negligently or improperly, tort will lie.<sup>14</sup> It has been held, however, that if repairs otherwise proper

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<sup>8</sup> *New England Tel., etc. Co. v. Boston Terminal Co.*, 182 Mass. 397, 65 N. E. 835 (1903); *Boston Electric Light Co. v. Boston Terminal Co.*, 184 Mass. 566, 69 N. E. 346 (1904).

<sup>9</sup> See *Commonwealth v. Morrison*, 197 Mass. 199, 203, 83 N. E. 415, 416 (1908).

<sup>10</sup> *Mayo v. Springfield*, 136 Mass. 10 (1883).

<sup>11</sup> *Franklin v. Fisk*, 13 Allen 211 (1866).

<sup>12</sup> *Elder v. Bemis*, 2 Metc. 599 (1841); *Benjamin v. Wheeler*, 15 Gray 486 (1860); *Benjamin v. Wheeler*, 8 Gray 409 (1857).

<sup>13</sup> *Callender v. Marsh*, 1 Pick. 418 (1823); *Purinton v. Somerset*, 174 Mass. 556, 55 N. E. 461 (1899); *Underwood v. Worcester*, 177 Mass. 173, 58 N. E. 589 (1900).

<sup>14</sup> *Perry v. Worcester*, 6 Gray 544 (1856); *Stanchfield v. Newton*, 142 Mass. 110, 7 N. E. 703 (1886); *Brewer v. Boston, etc., R. R. Co.*, 113 Mass. 52 (1873).

in themselves be made in a proper manner, but with malicious motive, no action lies at common law.<sup>15</sup> At common law, then, the public authorities have a very wide discretion with respect to changes of surface within the highway location. Statutes, as will be later shown, have given damages with respect to some matters for which there was no liability at common law. But the right of the public authorities at common law has far-reaching effects upon the relation of the highway to waters of various kinds.

For the purposes of this article waters may be divided into two main groups,—watercourses and surface waters. A watercourse flows with some regularity between banks more or less defined.<sup>16</sup> Thus, in *Ashley v. Wolcott*,<sup>17</sup> Bigelow, J., said (p. 195):

“There is a broad distinction between a regular flowing stream and occasional and temporary outbursts of water, which in times of freshets fill up low and marshy places, and run over and inundate adjoining lands. To maintain a right to a watercourse or brook, it must be made to appear that the water usually flows in a certain direction and by a regular channel with banks or sides. It need not be shown to flow continually; it may even be dry at times, but it must have a well-defined and substantial existence.”

Yet some latitude is allowed with respect to definiteness of banks. Thus, where water flowed between banks with some regularity, then spread with no definite banks for about twelve rods, and then flowed between definite banks again, it was held that it was still a watercourse even at the point where the banks were indefinite.<sup>18</sup> A watercourse, then, is determined by two factors,—definiteness of banks and regularity of flow. Both must be present to a substantial extent. But it seems that some lack in either factor may be compensated by an additional amount of the other factor.

Surface water is water which has not yet become a watercourse.

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<sup>15</sup> *Benjamin v. Wheeler*, 8 Gray 409 (1857); *Benjamin v. Wheeler*, 15 Gray 486 (1860).

<sup>16</sup> *Luther v. Winnisimmet Co.*, 9 Cush. 171 (1851); *Ashley v. Wolcott*, 11 Cush. 192 (1853); *Dickinson v. Worcester*, 7 Allen 19 (1863); *Stanchfield v. Newton*, 142 Mass. 110, 7 N. E. 703 (1886); *Macomber v. Godfrey*, 108 Mass. 219 (1871). See also *Stimson v. Brookline*, 197 Mass. 568, 83 N. E. 893 (1908) (ancient ditch treated as watercourse).

<sup>17</sup> 11 Cush. 192 (1853).

<sup>18</sup> *Macomber v. Godfrey*, 108 Mass. 219 (1871).

Want of definiteness is the earmark of surface water. At times it may be considerable in extent.<sup>19</sup> It may even tend to flow in a definite direction.<sup>20</sup> But it is irregular in flow and has no definite, natural channel. It may become a watercourse, however, at some definite point. Thus, in *Nealley v. Bradford*,<sup>21</sup> the master found that what was mere surface water beyond the limits of the highway became a natural watercourse within the limits of the highway. In a word, it is want of regularity and definiteness which distinguishes flow of surface water from a watercourse.

A natural watercourse has been described as a natural easement appurtenant to the soil. Each riparian proprietor has a right that it flow to him substantially as it was wont to flow. The proprietor above may not divert it from the proprietor below; the proprietor below may not back it up upon the proprietor above. It is true that each riparian proprietor is entitled to use the water to some extent upon his tract. But for the purposes of this article, the precise nature and extent of this right to use need not be considered. Here it is sufficient to say that each riparian proprietor is entitled to the stream *ut currere solebat*.<sup>22</sup>

The right of the riparian proprietor to the stream as it was wont to flow does not yield to the highway easement. The public authorities have no inherent right to stop natural watercourses to the damage of riparian owners. Of course the rights of riparian owners are subject to the exercise of eminent domain,<sup>23</sup> just as other property rights are subject thereto. But even when a way is laid out across a natural watercourse, by an authority possessing the power of eminent domain, the rights of riparian owners must be considered. Thus, where a corporation was authorized to lay out a road over a natural watercourse, it was intimated that pro-

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<sup>19</sup> *Dickinson v. Worcester*, 7 Allen 19 (1863); *Cassidy v. Old Colony R. R. Co.*, 141 Mass. 174, 5 N. E. 142 (1886).

<sup>20</sup> *Parks v. Newburyport*, 10 Gray 28 (1857); *Dickinson v. Worcester*, 7 Allen 19 (1863); *Gannon v. Hargadon*, 10 Allen 106 (1865); *Cassidy v. Old Colony R. R. Co.*, 141 Mass. 174, 5 N. E. 142 (1886); *Middlesex Co. v. McCue*, 149 Mass. 103, 21 N. E. 230 (1889); *Collins v. Waltham*, 151 Mass. 196, 24 N. E. 327 (1890).

<sup>21</sup> 145 Mass. 561, 14 N. E. 652 (1888).

<sup>22</sup> *Merrifield v. Lombard*, 13 Allen 16 (1866).

<sup>23</sup> *Boston Belting Co. v. Boston*, 152 Mass. 307, 25 N. E. 613 (1890); *Boston Belting Co. v. Boston*, 183 Mass. 254, 67 N. E. 428 (1903); *Rowe v. Granite Bridge Corp.*, 21 Pick. 344 (1838); *Moulton v. Newburyport Water Co.*, 137 Mass. 163 (1884).

vision must be made for the watercourse or else damages paid.<sup>24</sup> And it has been held that a town is liable for permitting a third party to close the openings in a highway bridge built over a tidal stream, whereby the water was set back upon plaintiff's land.<sup>25</sup>

But while the bridge must be adequate to provide for conditions naturally to be anticipated, the city is not liable in tort because the bridge was insufficient for an extraordinary freshet.<sup>26</sup> Yet, where the bridge was negligently built in a manner insufficient to take care of the stream under ordinary conditions, tort will lie, even though the bridge was built under proper authority, since such authority must be reasonably and skillfully exercised.<sup>27</sup> On the other hand, the city is not liable because a bridge originally sufficient becomes insufficient to take care of the natural flow of the stream because of the unauthorized acts of third parties.<sup>28</sup> In bridging natural watercourses, then, the authorities are liable in tort if the bridge be insufficient for conditions naturally to be anticipated, but are not liable for damage due to extraordinary freshets or to the unauthorized acts of third parties.

Culverts are subject to very similar rules. The culvert need only be adequate for the flow of the stream in its natural state.<sup>30</sup> Thus, a city is not liable because a culvert, originally sufficient, becomes insufficient by reason of subsequent alterations in the stream made by the county commissioners.<sup>30</sup> On the other hand, the city must construct and maintain a culvert sufficient for the natural flow of the stream.<sup>31</sup> Thus, tort will lie for failure by the city to use reasonable care to keep the culvert clear, even though the plaintiff owns the land on both sides of the street and the fee of the street.<sup>32</sup> The rule is thus declared by Bigelow, J., in *Parker v. Lowell* (p. 357):<sup>33</sup>

<sup>24</sup> *Rowe v. Granite Bridge Corp.*, 21 Pick. 344 (1838).

<sup>25</sup> *Lawrence v. Fairhaven*, 5 Gray 110 (1855). See also *Stimson v. Brookline*, 197 Mass. 568, 83 N. E. 893 (1908).

<sup>26</sup> *Sprague v. Worcester*, 13 Gray 193 (1859).

<sup>27</sup> *Perry v. Worcester*, 6 Gray 544 (1856).

<sup>28</sup> *Wheeler v. Worcester*, 10 Allen 591 (1865).

<sup>30</sup> *Cochrane v. Malden*, 152 Mass. 365, 25 N. E. 620 (1890). See also R. L., c. 48, § 57, and STAT. 1906, c. 463, § 101.

<sup>31</sup> *Parker v. Lowell*, 11 Gray 353 (1858); *Stanchfield v. Newton*, 142 Mass. 110, 7 N. E. 703 (1886).

<sup>32</sup> *Parker v. Lowell*, 11 Gray 353 (1858).

<sup>33</sup> 11 Gray 353. The language is evidently borrowed from Chief Justice Shaw in

"It is now the well settled rule of law in this commonwealth that in all cases where a highway, turnpike, bridge, town way or other way is laid across a natural stream of water, it is the duty of those who use such franchise or privilege to make provision by open bridges, culverts or other means for the free current of the water, so that it shall not be obstructed and pent up to flow back on lands belonging to the riparian proprietors. And it is their duty not only to make such bridge, culvert or passage for water, but to keep it in such condition that it shall not obstruct the stream."

Yet natural watercourses and riparian rights may be made to yield to the public interest. Thus, equity will not enjoin a bridge corporation which possesses the right of eminent domain from diverting a natural watercourse into an artificial canal if such a change be reasonably necessary.<sup>34</sup> The riparian owner is left to his remedy in damages under the statute for any acts lawfully done in the exercise of the powers conferred.<sup>35</sup> But where the damage is inflicted unnecessarily<sup>36</sup> or negligently<sup>37</sup> in the exercise of such powers, tort will lie. It has, however, been held that, where the acts were beyond the scope of the powers conferred and not merely an improper exercise of those powers, no action lay against the town,<sup>38</sup> apparently upon the theory that the acts were the acts of the officers, individually, rather than of the public authority. Authority may be given, therefore, to alter natural watercourses

*Lawrence v. Fairhaven*, 5 Gray 110, 116, (1855). The same rule has been applied to railroads. *Estabrooks v. Peterborough, etc.*, R. R. Co., 12 Cush. 224 (1853); *Blood v. Nashua, etc.*, R. R. Co., 2 Gray 137 (1854); *Mellen v. Western Railroad Corp.*, 4 Gray 301 (1855).

<sup>34</sup> *Rowe v. Granite Bridge Corp.*, 21 Pick. 344 (1838).

<sup>35</sup> *Rowe v. Granite Bridge Corp.*, 21 Pick. 344 (1838) (*semble*); *Hull v. Westfield*, 133 Mass. 433 (1882); *Boston Belting Co. v. Boston*, 149 Mass. 44, 20 N. E. 320 (1889); 152 Mass. 307, 25 N. E. 613 (1890); 183 Mass. 254, 67 N. E. 428 (1903); *Holleran v. Boston*, 176 Mass. 75, 57 N. E. 220 (1900).

<sup>36</sup> *Curtis v. Eastern R. R. Co.*, 14 Allen 55 (1867), 98 Mass. 428 (1868).

<sup>37</sup> *Boston Belting Co. v. Boston*, 149 Mass. 44, 20 N. E. 320 (1889); 183 Mass. 254, 67 N. E. 428 (1903); *Lawrence v. Fairhaven*, 5 Gray 110 (1855); *Perry v. Worcester*, 6 Gray 544 (1856); *Morse v. Worcester*, 139 Mass. 389, 2 N. E. 694 (1885). See also *Estabrooks v. Peterborough, etc. R. R. Co.*, 12 Cush. 224 (1853); *Mellen v. Western R. R. Corp.*, 4 Gray 301 (1855). But if the damage be caused in the exercise of the police power by a city acting in a governmental capacity, no action lies. *Harrington v. Worcester*, 186 Mass. 594, 72 N. E. 326 (1904).

<sup>38</sup> *Anthony v. Adams*, 1 Metc. 284 (1840); *Tyler v. Revere*, 183 Mass. 98, 66 N. E. 597 (1903).

for public purposes<sup>39</sup> with liability for damages under the statute for acts lawfully done in the exercise of such authority and a further liability in tort for damage unnecessarily or negligently caused by misuse of such powers.

An upper riparian proprietor has no right to pollute the waters of a natural watercourse so as to render them unfit for lawful riparian uses by a lower riparian proprietor.<sup>40</sup> But in *Jackman v. Arlington Mills*<sup>40</sup> it was held that he may collect water into a channel and discharge it into a natural watercourse if he does not unduly increase the stream or pollute it. Yet, if he thereby creates a nuisance as to the lower proprietor, tort for nuisance will lie.<sup>41</sup> The lower proprietor may also maintain a bill in equity to prevent invasion of his riparian right,<sup>42</sup> though equity may decline to interfere if no material damage is done and no prescriptive right can be gained.<sup>43</sup> A private riparian owner, then, is not permitted to pollute a natural watercourse to any material extent.

The rights of the public are harder to determine because they are complicated by questions of procedure. The legislature may authorize the taking of or injury to riparian rights with corresponding rights of compensation under the statute.<sup>44</sup> In such a case the acts authorized by the statute cease to be wrongful, and neither a bill in equity<sup>45</sup> nor action of tort<sup>46</sup> will lie therefor

<sup>39</sup> *Beals v. Brookline*, 174 Mass. 1, 54 N. E. 339 (1899), and n. 23.

<sup>40</sup> *Harris v. Mackintosh*, 133 Mass. 228 (1882); *Parker v. American Woolen Co.*, 195 Mass. 591, 81 N. E. 466 (1907); *Merrifield v. Lombard*, 13 Allen 16 (1866); *McNamara v. Taft*, 196 Mass. 597, 83 N. E. 310 (1907); *Dwight Printing Co. v. Boston*, 122 Mass. 583 (1877); *Jackman v. Arlington Mills*, 137 Mass. 277 (1884).

<sup>41</sup> *McGenness v. Adriatic Mills*, 116 Mass. 177 (1874).

<sup>42</sup> *Harris v. Mackintosh*, 133 Mass. 228 (1882); *Parker v. American Woolen Co.*, 195 Mass. 591, 81 N. E. 466 (1907); *Merrifield v. Lombard*, 13 Allen 16 (1866); *McNamara v. Taft*, 196 Mass. 597, 83 N. E. 310 (1907).

<sup>43</sup> *Brookline v. Mackintosh*, 133 Mass. 215 (1882).

<sup>44</sup> *Washburn & Moen Co. v. Worcester*, 116 Mass. 458 (1875); *Rowe v. Granite Bridge Corp.*, 21 Pick. 344 (1838); *Moulton v. Newburyport Water Co.*, 137 Mass. 163 (1884); *Boston Belting Co. v. Boston*, 149 Mass. 44, 20 N. E. 320 (1889); 152 Mass. 307, 25 N. E. 613 (1890); 183 Mass. 254, 67 N. E. 428 (1903).

<sup>45</sup> *Rowe v. Granite Bridge Corp.*, 21 Pick. 344 (1838); *Washburn & Moen Co. v. Worcester*, 116 Mass. 458 (1875).

<sup>46</sup> *Perry v. Worcester*, 6 Gray 544, 547 (1856) (*semble*); *Flagg v. Worcester*, 13 Gray 601 (1859); *Emery v. Lowell*, 104 Mass. 13, 16 (1870); *Hull v. Westfield*, 113 Mass. 433 (1882); *Boston Belting Co. v. Boston*, 149 Mass. 44, 20 N. E. 320 (1889); *Bainard v. Newton*, 154 Mass. 255, 27 N. E. 995 (1891); *Holleran v. Boston*, 176 Mass. 75, 57 N. E. 220 (1900).



so long as damage is not negligently caused thereby. Moreover, this is true even though the acts, if unauthorized by statute, would be tortious.<sup>47</sup> The statute in effect takes away the remedy at common law by action of tort and substitutes therefor the statutory remedy.<sup>48</sup> But this renders the statutory remedy exclusive. Consequently the failure of the plaintiff to maintain his action of tort is no indication at all that a common-law right has not been invaded. Such an action may fail either because the injury to the plaintiff is *damnum absque injuria* or because he has mistaken his remedy.

On the other hand, recovery by petition under the statute does not necessarily indicate invasion of a common-law right. The statute may give recovery for injury even where no common-law right is invaded. Thus, the building of a subway in the highway is not an invasion of the common-law right of the abutter.<sup>49</sup> Yet the subway statute has been held to give damages for an act which would impose no liability at common law.<sup>50</sup> A similar liberal construction has been placed upon the grade-crossing act,<sup>51</sup> upon the highway statute,<sup>52</sup> and upon the act which provided for improving Stony Brook,<sup>53</sup> to cite merely two or three examples. Of course the question must depend on the construction of the particular statute involved. But there is a tendency on the part of the court to construe such statutes as *in pari materia* one with the other, upon the ground that they are part of a general scheme of legislation.<sup>54</sup> Hence success under the statute does not indicate the existence of a common-law right any more than failure in tort

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<sup>47</sup> *Hull v. Westfield*, 133 Mass. 433 (1882); *Washburn & Moen Co. v. Worcester*, 116 Mass. 458 (1875).

<sup>48</sup> *Perry v. Worcester*, 6 Gray 544, 547 (1856) (*semble*); *Boston Belting Co. v. Boston*, 149 Mass. 44, 20 N. E. 320 (1889); *Holleran v. Boston*, 176 Mass. 75, 57 N. E. 220 (1900). But cf. *Westcott v. Boston*, 186 Mass. 540, 72 N. E. 89 (1905).

<sup>49</sup> *Sears v. Crocker*, 184 Mass. 586, 69 N. E. 327 (1904).

<sup>50</sup> *Fifty Associates v. Boston*, 201 Mass. 585, 88 N. E. 427 (1909).

<sup>51</sup> *Hyde v. Fall River*, 189 Mass. 439, 75 N. E. 953 (1905), overruling *Rand v. Boston*, 164 Mass. 354, 41 N. E. 484 (1895).

<sup>52</sup> *Marsden v. Cambridge*, 114 Mass. 490 (1874); *Woodbury v. Beverly*, 153 Mass. 245, 26 N. E. 851 (1891).

<sup>53</sup> *Boston Belting Co. v. Boston*, 152 Mass. 307, 25 N. E. 613 (1890); 183 Mass. 254, 67 N. E. 428 (1903).

<sup>54</sup> *Hyde v. Fall River*, 189 Mass. 439, 75 N. E. 953 (1905); *Fifty Associates v. Boston*, 201 Mass. 585, 88 N. E. 427 (1909).

indicates the absence of a common-law right. All that can be said is that in a given case a particular method of procedure has succeeded or failed.

It now remains to consider the cases somewhat in detail. It has been held that tort would not lie for obstructing a watercourse by deposits from drains which carried off the wash from the streets where the amount of water cast into the stream was not greater than the natural surface drainage would have been.<sup>55</sup> The court, however, intimated that, in so far as the damage was caused by wash from the streets, the remedy was under the statute.<sup>55</sup> Again, it was held that tort would not lie for opening a surface-water drain within the limits of the highway into a culvert at a point where the culvert crossed the highway, and thereby causing the culvert to overflow, the remedy, if any, being under the statute.<sup>56</sup> But if large quantities of water are collected from various streets and turned into a natural watercourse, so that it overflows and deposits filth on the land of a lower riparian owner in such quantities as to create a nuisance as to him, it is said that tort will lie.<sup>57</sup>

But where a lower riparian owner was inconvenienced by pollution of a stream due to entering a city drain therein, it was held that there could be no recovery in tort unless the drain was improperly constructed or maintained.<sup>58</sup> It has also been held that equity will not enjoin a city, at the instance of a riparian proprietor, from turning a reasonable amount of surface drainage into a watercourse, even though some pollution was caused thereby, the plaintiff being left to his remedy under the statute.<sup>59</sup> The cases above considered, it should be noted, dealt only with the disposal of *surface* water. Here it seems to be a question of degree.<sup>60</sup> A moderate discharge,<sup>60</sup> or even one which causes some overflow,<sup>61</sup> will not support either an action at law<sup>61</sup> or a bill in equity;<sup>60</sup>

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<sup>55</sup> *Wheeler v. Worcester*, 10 Allen 591 (1865).

<sup>56</sup> *Flagg v. Worcester*, 13 Gray 601 (1859); *Emery v. Lowell*, 104 Mass. 13 (1870); *Holleran v. Boston*, 176 Mass. 75, 57 N. E. 220 (1900). The statute is the statute which deals with the repair of highways, R. S., c. 25, § 6; G. S., c. 44, § 19; P. S., c. 52, § 15; R. L., c. 51, § 15.

<sup>57</sup> *Manning v. Lowell*, 130 Mass. 21, 25 (1880).

<sup>58</sup> *Merrifield v. Worcester*, 110 Mass. 216 (1872).

<sup>59</sup> *Bainard v. Newton*, 154 Mass. 255, 27 N. E. 995 (1891).

<sup>60</sup> *Ibid.*

<sup>61</sup> See n. 56.

but an immoderate discharge, gathered from a considerable area and sufficient to cause a nuisance,<sup>62</sup> will support an action of tort.

A distinction is made, however, between drainage of *surface* water and *sewers*. Thus, tort will lie for ending a common sewer in the tail race of the plaintiff's mill, even though the sewer enter the tail race where it passed under the highway in a culvert.<sup>63</sup> It is true that, where a statute<sup>64</sup> authorizes the use of a brook as a sewer and gives damages, equity will not restrain the acts authorized by the statute<sup>65</sup> unless they are being performed in a negligent manner,<sup>66</sup> but will leave the parties to the statutory remedy. On the other hand, tort will lie where a city builds a sewer across the plaintiff's land and ends it in the plaintiff's canal, even though the canal was built upon the site of a natural watercourse.<sup>67</sup> And where the city casts sewage into a watercourse<sup>68</sup> or canal<sup>69</sup> in such quantities as to create a nuisance as to the plaintiff, relief may be had both at law<sup>70</sup> and in equity.<sup>71</sup> Logically, perhaps, it is difficult to distinguish between sewers and surface drainage. Yet there is a marked difference in degree. Sewage easily creates a nuisance, while surface water is less apt to do so. Moreover, relief has been given where the quantity and quality of the surface water created a nuisance. Undoubtedly the difference in degree explains the difference in the rule of law.

Artificial streams are entitled to less protection than natural watercourses because of their different origin. In the first place it is wrongful to collect water into an artificial stream or channel

<sup>62</sup> *Manning v. Lowell*, 130 Mass. 21, 25 (1880).

<sup>63</sup> *Nevins v. Fitchburg*, 174 Mass. 545, 55 N. E. 321 (1899).

<sup>64</sup> STAT. 1867, c. 106. This statute has been frequently construed. See *Harrington v. Worcester*, 186 Mass. 594 (1905), which construes a later enactment.

<sup>65</sup> *Washburn & Moen Co. v. Worcester*, 116 Mass. 458 (1875).

<sup>66</sup> *Morse v. Worcester*, 139 Mass. 389, 2 N. E. 694 (1885).

<sup>67</sup> *Proprietors of Locks and Canals v. Lowell*, 7 Gray 223 (1856).

<sup>68</sup> *Woodward v. Worcester*, 121 Mass. 245 (1876); *Whitten v. Haverhill*, 204 Mass. 95, 90 N. E. 409 (1910); *Haskell v. New Bedford*, 108 Mass. 208 (1871); *Brayton v. Fall River*, 113 Mass. 218 (1873).

<sup>69</sup> *Boston Rolling Mills v. Cambridge*, 117 Mass. 396 (1875). Similarly, as to a mill pond, *Middlesex Co. v. Lowell*, 149 Mass. 509, 21 N. E. 872 (1889).

<sup>70</sup> *Haskell v. New Bedford*, 108 Mass. 208 (1871); *Whitten v. Haverhill*, 204 Mass. 95, 90 N. E. 409 (1910); *Brayton v. Fall River*, 113 Mass. 218 (1873).

<sup>71</sup> *Woodward v. Worcester*, 121 Mass. 245 (1876); *Boston Rolling Mills v. Cambridge*, 117 Mass. 396 (1875); *Haskell v. New Bedford*, 108 Mass. 208 (1871).

and cast it upon adjoining property.<sup>72</sup> Indeed the wrong does not depend upon the size of the stream. Thus, it has been held that it is improper to cast water artificially upon a neighbor's land, either in a stream or drop by drop.<sup>73</sup> Hence an easement to cast water in this manner may be acquired by prescription,<sup>74</sup> even though no easement is acquired by the flow of mere surface water, however long continued.<sup>75</sup> Indeed, to collect water into a stream and turn it upon the highway has been held to be a public nuisance,<sup>76</sup> for which, it is said, no easement can be acquired.<sup>77</sup> An artificial stream, then, is almost the antithesis of a natural watercourse. A riparian owner has a right to the flow of a natural watercourse in its natural state, unless that right is limited by grant or prescription, while the right to maintain an artificial stream must be acquired by grant or prescription.

The difference between natural watercourses and artificial streams produces a marked difference in rights. Bridges or culverts over natural watercourses must be maintained by the public authorities,<sup>78</sup> while, if an artificial watercourse be lawfully carried under the highway, the liability to repair the bridge is on the party who maintains the watercourse.<sup>79</sup> And where a culvert is placed in the highway to protect it from an artificial mill pond, the public authorities may close the culvert at their pleasure, if no prescriptive right thereto has been gained.<sup>80</sup> Again, the public authorities

<sup>72</sup> *Curtis v. Eastern R. R. Co.*, 14 Allen 55 (1867); *Curtis v. Eastern R. R. Co.*, 98 Mass. 428 (1868); *Bates v. Westborough*, 151 Mass. 174, 23 N. E. 1070 (1890). See also *Fitzpatrick v. Welch*, 174 Mass. 486, 55 N. E. 178 (1899), and n. 90.

<sup>73</sup> *Martin v. Simpson*, 6 Allen 102 (1863).

<sup>74</sup> *White v. Chapin*, 12 Allen 516 (1866); *Rathke v. Gardner*, 134 Mass. 14 (1883). See also *Stimson v. Brookline*, 197 Mass. 568, 83 N. E. 893 (1908); *Dickinson v. Worcester*, 7 Allen 19, 22 (1863) (*semble*).

<sup>75</sup> *Parks v. Newburyport*, 10 Gray 28 (1857); *Rathke v. Gardner*, 134 Mass. 14 (1883).

<sup>76</sup> *Leahan v. Cochran*, 178 Mass. 566, 60 N. E. 382 (1901); *Cavanagh v. Block*, 192 Mass. 63, 77 N. E. 1027 (1906) (private way); *Hynes v. Brewer*, 194 Mass. 435, 80 N. E. 503 (1907); *Field v. Gowdy*, 199 Mass. 568, 85 N. E. 884 (1908); *Drake v. Taylor*, 203 Mass. 528, 89 N. E. 1035 (1909).

<sup>77</sup> *Leahan v. Cochran*, 178 Mass. 566, 570, 60 N. E. 382 (1901) (*semble*); *Holyoke v. Hadley Co.*, 174 Mass. 424, 54 N. E. 889 (1899); *Hynes v. Brewer*, 194 Mass. 435, 80 N. E. 503 (1907).

<sup>78</sup> See n. 24-33 inclusive.

<sup>79</sup> *Perley v. Chandler*, 6 Mass. 453 (1810); *Lowell v. Proprietors of Locks and Canals*, 104 Mass. 18 (1870).

<sup>80</sup> *Drew v. Westfield*, 124 Mass. 461 (1878). But see *Stimson v. Brookline*, 197 Mass. 568, 83 N. E. 893 (1908).

are not bound to clear a culvert under a highway which carries surface water and under drainage from plaintiff's meadow.<sup>81</sup> Artificial streams, then, may be actually wrongful, and where lawful must be cared for by those who maintain them.

Surface waters have already been distinguished from natural watercourses.<sup>82</sup> The difference is really one of degree. Surface water lacks regularity of flow or definiteness of channel, though it may tend to flow in a certain definite direction and be considerable in amount. Any change of surface generally affects the flow of surface water. Raising the grade may exclude surface water which would otherwise flow on to the premises. Alterations of surface may change the direction in which surface water tends to flow from the place in question. But changes of grade or surface are incidental to control of the surface. If an owner could not make improvements without liability for changes in the behavior of surface water, he would be deprived of effective use of his property. The natural rights of the landowner and the difference in degree between surface water and natural watercourses have led to radical differences in the rules of law applicable to each class. The attitude of law and landowner alike is well illustrated by the following quotation from *Beals v. Brookline* (p. 20):<sup>83</sup>

"In the language of the older books surface water is regarded very largely by the law 'as a common enemy which every proprietor may fight or get rid of as best he may.' . . ."

A private owner has large powers and small liabilities with respect to surface water. Thus, no action lies for failure to prevent surface water from flowing on to the land of an adjoining proprietor.<sup>84</sup> But the adjoining proprietor may prevent such flow, even though the water gathers in injurious quantities on the land of the other owner.<sup>85</sup> He may prevent surface drainage from a highway, even though the highway is thereby injured.<sup>86</sup> Indeed

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<sup>81</sup> *Dickinson v. Worcester*, 7 Allen 19 (1863).

<sup>82</sup> *Anle*, n. 16-21.

<sup>83</sup> 174 Mass. 1, 54 N. E. 339 (1899).

<sup>84</sup> *Morrill v. Hurley*, 120 Mass. 99 (1876).

<sup>85</sup> *Gannon v. Hargadon*, 10 Allen 106 (1865); *Franklin v. Fisk*, 13 Allen 211 (1866); *Bates v. Smith*, 100 Mass. 181 (1868); *Cassidy v. Old Colony R. R. Co.*, 141 Mass. 174, 5 N. E. 142 (1886).

<sup>86</sup> *Franklin v. Fisk*, 13 Allen 211 (1866).

no prescriptive right to mere surface drainage can be gained.<sup>87</sup> Again, a landowner may change the surface of his land so that surface water which has flowed thereon is turned off on to the land of another.<sup>88</sup> Nor is he liable because ordinary cultivation of his land causes unusual quantities of soil to wash down into a neighboring mill pond.<sup>89</sup> So long as surface water retains its indefinite character, any landowner may exclude it from his premises or turn it on to the premises of another without liability.

But a landowner may not gather surface water into an artificial channel and cast it upon the premises of another.<sup>90</sup> Thus, it is wrong to cast water from a roof against the wall of a neighboring building.<sup>91</sup> And tort will lie where a railroad unnecessarily conducts water in an artificial channel and casts it upon neighboring land, even though the water is first made to percolate through the railroad embankment.<sup>92</sup> Indeed, to gather water into a stream and cast it upon the highway amounts to a public nuisance,<sup>93</sup> for which no prescriptive right can be gained,<sup>94</sup> although one owner may acquire a right by prescription to cast water in a stream on the premises of another.<sup>95</sup> The rule is really the converse of the rule with respect to natural watercourses. A landowner has no inherent right to prevent the ordinary flow of a natural stream to or from his property. Neither may he create an artificial stream and turn it upon the land of another.

The common-law right of the public authorities with respect to surface water in the highway is at least as great as that of the individual owner with respect to surface water on his premises.

<sup>87</sup> *Parks v. Newburyport*, 10 Gray 28 (1857).

<sup>88</sup> *Gannon v. Hargadon*, 10 Allen 106 (1865).

<sup>89</sup> *Middlesex Co. v. McCue*, 149 Mass. 103, 21 N. E. 230 (1889).

<sup>90</sup> *Martin v. Simpson*, 6 Allen 102 (1863); *Curtis v. Eastern R. R. Co.*, 14 Allen 55 (1867); 98 Mass. 428 (1868); *Rathke v. Gardner*, 134 Mass. 14, 16 (1883) (*semble*); *Bates v. Westborough*, 151 Mass. 174, 181, 23 N. E. 1070, 1071 (1890); *Fitzpatrick v. Welch*, 174 Mass. 486, 55 N. E. 178 (1899); *Daley v. Watertown*, 192 Mass. 116, 78 N. E. 143 (1906); *Westcott v. Boston*, 186 Mass. 540, 72 N. E. 89 (1905). See also *Smith v. Gloucester*, 201 Mass. 329, 333, 87 N. E. 626, 628 (1909).

<sup>91</sup> *Martin v. Simpson*, 6 Allen 102 (1863).

<sup>92</sup> *Curtis v. Eastern R. R. Co.*, 14 Allen 55 (1867); 98 Mass. 428 (1868). The court intimated that, if such discharge were necessary, the railroad should take and pay for the right by eminent domain.

<sup>93</sup> See *ante*, n. 76.

<sup>94</sup> See *ante*, n. 77.

<sup>95</sup> *White v. Chapin*, 12 Allen 516 (1866); *Rathke v. Gardner*, 134 Mass. 14 (1883).

Thus, the public authorities may prevent surface water from flowing from the premises of an abutter on to the highway.<sup>96</sup> They may also turn surface water on to the premises of an abutter without liability in tort.<sup>97</sup> Even if the water be gathered into gutters or channels, there is no tort liability, if these overflow upon the premises of an abutter,<sup>98</sup> so long as the water is not cast thereon in a definite channel. Indeed, it has been held that tort will not lie where surface water is drained into a cesspool within the limits of the highway and thence percolates or overflows into the cellar of an abutter.<sup>99</sup> It is not quite clear, however, whether these cases rest upon the ground that no common-law right of the abutter is infringed or upon the ground that there is a remedy by statute.<sup>100</sup> The statute makes liberal provision for damages due to laying out<sup>101</sup> and repairing<sup>102</sup> ways, and there is a special enactment with regard to the wash from ways.<sup>103</sup> Several of the cases which deny a remedy in tort intimate that there may be a remedy under the statute.<sup>104</sup> It may be that these cases go no farther than to hold that the plaintiff has mistaken his remedy. But even in that aspect they do not affirmatively indicate that the common-law right of the public with respect to surface water in the streets is any less than that of the abutter, while there are intimations that no common-law right of the abutter is infringed.<sup>105</sup>

On the other hand, the public authorities may not gather the surface water on the highway into a channel and turn the channel

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<sup>96</sup> *Keith v. Brockton*, 136 Mass. 119 (1883); *Dickinson v. Worcester*, 7 Allen 19 (1863).

<sup>97</sup> *Turner v. Dartmouth*, 13 Allen 291 (1866); *Flagg v. Worcester*, 13 Gray 601. (1859).

<sup>98</sup> *Collins v. Waltham*, 151 Mass. 196, 24 N. E. 327 (1890); *Hewett v. Canton*, 182 Mass. 220, 65 N. E. 42 (1902).

<sup>99</sup> *Kennison v. Beverly*, 146 Mass. 467, 16 N. E. 278 (1888); *Barry v. Lowell*, 8 Allen 127 (1864).

<sup>100</sup> See *ante*, n. 44-54.

<sup>101</sup> R. L., c. 48, §§ 13-15; as to state highways, see R. L., c. 47, § 9; as to town ways, see R. L., c. 48, § 68.

<sup>102</sup> R. L., c. 51, § 15.

<sup>103</sup> R. L., c. 51, § 12, and see *post*, n. 109-112.

<sup>104</sup> See *ante*, n. 97-99.

<sup>105</sup> See *Flagg v. Worcester*, 13 Gray 601 (1859); *Turner v. Dartmouth*, 13 Allen 291 (1866); *Collins v. Waltham*, 151 Mass. 196, 24 N. E. 327 (1890); *Kennison v. Beverly*, 146 Mass. 467, 16 N. E. 278 (1888).

upon the abutter.<sup>106</sup> It is true that in *Flagg v. Worcester*<sup>107</sup> it was held that there was no liability in tort for digging a gutter in the highway and opening it within the limits of the highway into a culvert constructed for the private drainage of the abutters. But in that case the channel which led to the plaintiff's premises was not constructed by the public authorities. Moreover, the court intimates that, if the acts in question were done in repairing the highway, the remedy was under the statute. Perhaps the fact that the culvert ran under the highway made the case resemble the decisions which hold that a certain amount of surface water may be cast in a stream into a watercourse.<sup>108</sup> Moreover, in *Daley v. Watertown*<sup>109</sup> it was held that tort would lie where the town, by license from one Coolidge, gathered surface water into a definite channel and conducted it into a pond which overflowed to the damage of the plaintiff. The latter case seems conclusive against any common-law right of the authorities to turn water in a stream upon the land of an abutter.

But the authorities may gather surface water into a definite channel and conduct that channel within the limits of the highway without incurring tort liability to the abutter. Where the public authorities dug a watercourse within the limits of the highway, an abutter who was thereby incommoded could not maintain an action of tort.<sup>110</sup> And where highway surveyors, acting within the scope of their authority, dug a watercourse in the highway, evidence that they acted from malicious motives was held to be immaterial.<sup>111</sup> Again, where a natural watercourse rises within the limits of the highway and lower riparian owners consent to its diversion, the stream may be carried in front of plaintiff's property in an open ditch.<sup>112</sup> In all these cases the remedy of the plaintiff, if any, is under the statute,<sup>113</sup> which makes special provision for dealing with the wash in ways.<sup>114</sup>

<sup>106</sup> *Franklin v. Fisk*, 13 Allen 211 (1866); *Daley v. Watertown*, 192 Mass. 116, 78 N. E. 143 (1906). See also *Collins v. Waltham*, 151 Mass. 196, 24 N. E. 327 (1890); *Westcott v. Boston*, 186 Mass. 540, 72 N. E. 89 (1905); *Smith v. Gloucester*, 201 Mass. 329, 87 N. E. 626 (1909).

<sup>107</sup> 13 Gray 601 (1859).

<sup>108</sup> See *ante*, n. 55-62. Cf. n. 63-71.

<sup>109</sup> 192 Mass. 116, 78 N. E. 143 (1906).

<sup>110</sup> *Elder v. Bemis*, 2 Metc. 599 (1841).

<sup>111</sup> *Benjamin v. Wheeler*, 8 Gray 409 (1857); 15 Gray 486 (1860).

<sup>112</sup> *Nealley v. Bradford*, 145 Mass. 561, 14 N. E. 652 (1888).

<sup>113</sup> R. S., c. 25, § 5; G. S., c. 44, § 10; P. S., c. 52, § 12; R. L., c. 51, § 12.

<sup>114</sup> *Ante*, n. 110-112.



It has been already shown that tort will not lie where the public authorities turn surface water from a highway upon an abutter unless the water be gathered in an artificial channel. But the highway statute makes liberal provision for those injured by public work in respect of highways.<sup>115</sup> Injury due to surface water has been held a proper element of such damage. Thus, in *Walker v. Old Colony R. R. Co.*,<sup>116</sup> it was held that injury due to surface water might be recovered under the railroad statute.<sup>117</sup> And where a statute gave damages to "any person injured in his property,"<sup>118</sup> by reason of the removal of obstructions in Stony Brook, it was held that injury caused by the removal of culverts might be recovered, even though no common-law right of the petitioner had been infringed.<sup>119</sup> These cases indicate the liberal spirit in which such acts are construed.<sup>120</sup>

The precise case has arisen under that section of the statute which gives damages for injury resulting from *repairs*<sup>121</sup> in ways. In *Woodbury v. Beverly*<sup>122</sup> a petition was brought for damages under P. S., c. 52, § 15, and evidence was offered that by reason of the repairs the wash from the streets was cast upon petitioner's property and that surface water was prevented from escaping therefrom, and the court, over respondent's objection, permitted the case to go to the jury upon these points. In holding this ruling was proper, Morton, J., said (p. 248):

"If the repair causes surface water to flow or remain upon premises where it did not flow or remain before, and such premises are thereby rendered damp, wet, unhealthy and less valuable than before, the landowner certainly 'sustains damage in his property' by reason of the repair. It is none the less a damage because resulting from surface water which the action of the town in the repair of its way has caused to flow or remain on the premises of the landowner."

In view of this case it is probable that a similar liberal construction will be given to the section<sup>123</sup> which gives damages for laying out

<sup>115</sup> See NICHOLS, LAND DAMAGES, chs. iii, iv. See also *ante*, n. 50-54.

<sup>116</sup> 103 Mass. 10 (1869).

<sup>117</sup> G. S., c. 63, §§ 21, 22.

<sup>118</sup> *Cf.* R. L., c. 48, §§ 13, 68, and R. L., c. 51, § 15.

<sup>119</sup> *Boston Belting Co. v. Boston*, 152 Mass. 307, 25 N. E. 613 (1890); 183 Mass. 254, 67 N. E. 428 (1903).

<sup>120</sup> See *ante*, n. 50-54, 115.

<sup>121</sup> P. S., c. 52, § 15, now R. L., c. 51, § 15.

<sup>122</sup> 153 Mass. 245, 26 N. E. 851 (1891).

<sup>123</sup> R. L., c. 48, §§ 13-15. As to town ways, R. L., c. 48, § 68.

of ways which is manifestly *in pari materia*, with the section here construed.<sup>124</sup>

One further question must be considered, though the authorities in regard to it are rather hazy. We have seen that the public authorities must make provision for natural water courses, and have no inherent right to gather water into a stream and cast it upon the abutter. Also the public authorities are confined within the limits of the highway location.<sup>125</sup> How far may the public authorities upon payment of compensation "take" a right to interfere with natural streams or to collect water into a stream and cast it upon the abutter as an incident to laying out or relocating the highway? The cases intimate that under present statutes the power of the public authorities is exhausted when the highway is located, and that there is no power to take additional easements in land beyond the limits of the location for the benefit of the highway.<sup>126</sup> None of the cases last cited<sup>126</sup> deals with the disposition of waters by the public authorities. On the other hand the legislature may confer power to deal with natural streams,<sup>127</sup> and it would seem might authorize the creation and disposition of artificial streams. It has likewise been intimated that a railroad corporation might in case of necessity and upon payment of compensation have incidental power to discharge water in a stream upon land not taken.<sup>128</sup> Conceivably this principle might be extended to the public authorities who are charged with the duty of laying out ways, though this seems very doubtful.<sup>129</sup> In the absence of express decision the solution of the problem seems to lie in legislative enactment.

The cases then point to the following conclusions:

1. When a highway is laid out across a natural watercourse, a bridge or culvert sufficient to accommodate the natural flow of the stream must be provided and maintained by the public; but

<sup>124</sup> See also n. 50-54, 116, 119.

<sup>125</sup> *Preston v. Newton*, 213 Mass. 483, 100 N. E. 641 (1913). See also n. 10 and 11.

<sup>126</sup> *Preston v. Newton*, 213 Mass. 483, 100 N. E. 641 (1913); *Doon v. Natick*, 171 Mass. 228, 50 N. E. 616 (1898); *Simonds v. Walker*, 100 Mass. 112 (1868).

<sup>127</sup> See n. 23, 39, 44, 64-66.

<sup>128</sup> *Curtis v. Eastern R. R. Co.*, 9 Allen 55 (1867); *Babcock v. Western R. R. Corp.*, 9 Metc. 553 (1845).

<sup>129</sup> See n. 126, 106.

provision need not be made at that time for extraordinary freshets or for subsequent changes under public authority.

2. When a natural watercourse crosses the highway, surface water may be gathered into a stream and cast therein without liability in tort for increasing the flow of the stream or for pollution, unless the increase or pollution is so great as to constitute a nuisance; but the cases intimate that there may be a remedy in damages under the statute.

3. Tort does not lie for turning surface water from the highway upon an abutter unless the water be turned upon him in a definite channel, nor will tort lie for overflow or percolation of surface water from gutters or cesspools; but it has been held that there is a remedy under the statute when such injury is caused by repairs in the highway, and it seems probable that a similar construction will be given to other damage sections of the highway statute.

4. Where a statute authorizes certain acts, equity will not restrain them nor will tort lie for them; instead, recovery must be sought in the manner prescribed by the statute, although there may be a remedy in tort if the powers conferred be exercised negligently or improperly. In theory this distinction may be clear, but in practice the precise line of demarcation is very difficult to determine. As a practical matter, the safe procedure is to bring both a petition for damages under the statute and an action of tort and then try both cases together. This was done in *Boston Belting Co. v. Boston*, *supra*, 119.

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